

REMARKS

Applicants thank the examiner for examination to date and respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

Claims 1-12 are currently pending. Claim 1, the only independent claim, is currently amended. Claims 9 - 12 are new and fully supported by the instant specification.

This amendment adds, changes and/or deletes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

35 U.S.C. 102(b) rejections

Claim 1-6 and 8 were rejected under 35 U.S.C. 102(b) as being anticipated by Guanti *et al.* (“Guanti”). Applicants respectfully traverse in that every element of the claimed invention, reflected in the current amendments, is not taught or suggested by this reference.

Guanti discloses PPL-catalyzed hydrolysis of an allene (see compound 46 on page 1543 and second paragraph, left column of page 1546). However, this reference is silent with respect to acylation of allenes. Specifically, there is no teaching or suggestion for carrying out a lipase-catalyzed acylation of an allene, as claimed.

The amendment to claim 1 removes limitations pertaining to hydrolysis of an allene which were recited in the alternative to acylation of the same. Accordingly, the hydrolysis scheme of Guanti does not read on claim 1.

As noted, Guanti is silent with respect to acylation of allenes and therefore does not teach or suggest every element of the invention as presently claimed. Applicants therefore request withdrawal of this rejection.

35 U.S.C. 103(a) rejections

1. Claim 7 was rejected under 35 U.S.C. 103(a) as obvious over the disclosure of Guanti. Applicants respectfully traverse. This rejection is now moot in view of the amended claims since not every element of the invention as claimed is taught or suggested in this reference.

The office action suggests that interchanging substituents of allene 46 for those on compound of formula 2, as set forth in claim 7, would have been obvious to one of ordinary skill in the art. However, this reference is still deficient in showing every element of the claimed invention as amended.

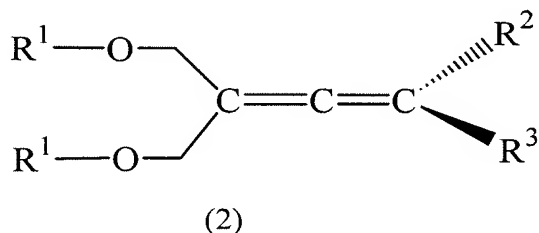
Guanti does not teach acylation of an allene compound as required in claim 7. Additionally, The PPL-catalyzed hydrolysis scheme of Guanti does not read on the claims as amended. Therefore, this rejection is effectively overcome and applicants request withdrawal of the same.

2. Claims 1-3 and 5-8 were rejected under 35 U.S.C. 103(a) as being unpatentable over Guanti in view of Langrand *et al.* (“Landgrand”). Applicants respectfully traverse. There is no motivation to combine these references. Moreover, this combination references does not properly result in every element of the claimed invention.

Langrand teaches racemic menthol resolution via hydrolysis, ester interchange and ester formation. It therefore relates to optical resolution of a racemic alcohol and not asymmetric synthesis of non-asymmetric compounds. Furthermore, there are major structural differences between the alkane compounds (“e.g. menthol”) of Landgrand and allenes of the instant claims.

There is no motivation to combine Guanti and Landgrand. A person of ordinary skill in the art carrying out resolution of racemic menthol would not turn to a disclosure pertaining to asymmetrization of an allene (or the other way around) for guidance. Also, the chemical structure of the compounds in each reference are notably dissimilar, further implying a lack of expectation of success in cross-substituting one chemical reaction for the other.

The combination of Landgrand and Guanti even if somehow appropriate, still does not establish every element of the claimed invention. For example, claim 1 as currently amended, sets forth a method requiring reacting a starting material of the formula (2) with an acylating agent.



wherein R¹ is Hydrogen and R² and R³ are different and each represents a hydrogen atom, an optionally substituted C₁₋₂₀ alkyl group or an optionally substituted C₆₋₂₀ aryl group.

The references do not teach or suggest this starting material. Therefore the references cannot teach acylation thereof, as required in the claims. Consequently, the claimed method on the whole is not shown in the prior art. Applicants therefore request withdrawal of this rejection.

3. Claim 4 was rejected under 35 U.S.C. 103(a) as being unpatentable over Guanti. and Langrand in further view of Wang *et al.* ("Wang"). Applicants respectfully traverse. Wang does not cure the aforementioned deficiencies of Guanti. and Langrand individually or as a combination.

Wang teaches an irreversible procedure for acylation using lipases as catalysts. The disclosure is silent on acylation of allenes and asymmetrization thereof.

As discussed under section 2 above, and hereby incorporated in this section, Landgrand and Guanti are not combinable, and do not teach every step of the claimed invention. Therefore all three references are not combinable. Wang also does not cure the aforementioned deficiencies in that it does not teach the claimed starting material nor acylation thereof. Therefore, this combination also fails to establish every element of the claimed invention in the prior art. Applicants therefore request withdrawal of this rejection.


Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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